

**STEEL MATE**  
*Automotive*

PTS800V7

*Front & rear  
parking assist system*

*Top front windshield display*



Manual

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# **Parking Assist System**

## **User's Manual**

### **Important notice**

Parking assist systems help to provide assistance when driving forward or reversing. Driving skills, such as slowing down, use of mirrors etc. is always essential.

1. This unit is for vehicles with 12V DC.
2. Unit should be installed by a professional auto technician.
3. Route wiring harness away from heat sources and electrical components.
4. It is strongly recommended to check the position of the sensors before the actual drilling of the holes.
5. Perform test after finishing the installation.

### **Disclaimer**

The parking assist system is designed as a driver assistance device, and should not be used as a substitute for safe parking practices. You must constantly check the outside circumstance while parking.

Its distributors do not guarantee or assume liability for collisions or damages while parking your vehicle.

## About the product

Parking assist system is an ultrasonic distance monitoring system. It electronically detects the area in front of and/or at rear of your vehicle while parking, and alerts you with audio and visual warnings. It assists the driver when parking and in manoeuvring situation.

PTS800V7 is a front and rear parking assist system with blue wide LCD display. All the detachable sensors are water-resistance and can be easily changed. Combined with the anti-interference and anti-false alert technology, the system can detect obstacles in any weather conditions and response quickly. The system has intelligent detection, which is ideal for cars with tow-bar or spare tire.

Every piece of our products has passed the most stringent test before releasing to the market. It is reliable at a wide temperature range (  $-40^{\circ}\text{C}$  ~  $+80^{\circ}\text{C}$  ) and becomes very useful when you are parking at a raining day, snowing day or at night etc. With the help of parking assist system, you can enjoy a comfortable, relaxed and safer parking experience.

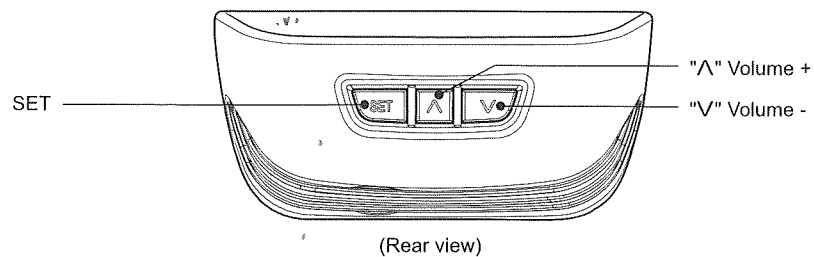
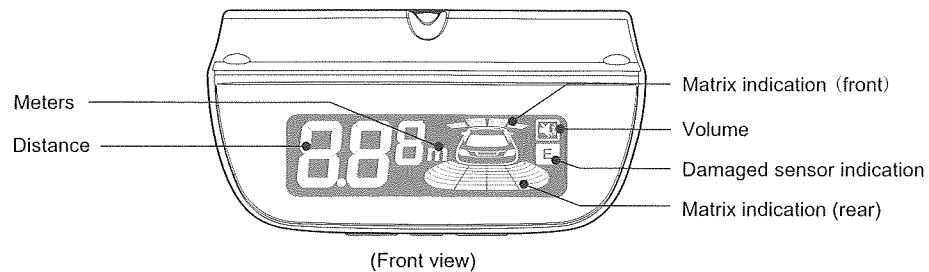
## Key feature

- Complete front & rear protection
- 0.08s response time
- Display installed on top of front windshield
- Anti-false alert technology
- Blue wide screen display
- Self-test function
- Voice / beep alert selectable
- Intelligent detection, supper for cars with tow-bar, spare tire or other protrusion

## Technical specifications

- Input voltage: 9 ~ 16VDC
- Working current: < 300mA
- Static current: < 80mA
- Operation temperature:  $-40^{\circ}\text{C}$  ~  $+80^{\circ}\text{C}$
- Beep volume: 50~70dB
- Detection range:
  - Front: 0.10~0.99m/0.33~3.25ft  
0.10~0.69m/0.33~2.26ft (reversing)
  - Rear: 0.10~2.59m/0.33~8.50ft
- Display range:
  - Front: 0.3~0.99m/0.98~3.25ft  
0.3~0.69m/0.98~2.26ft (reversing)
  - Rear: 0.3~2.59m/0.98~8.50ft

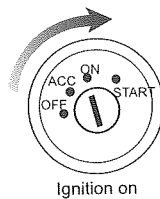
## LCD display



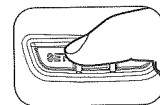
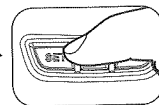
## Voice and volume adjustment

### Turning ON/OFF voice alert

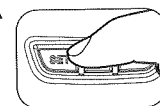
①



②

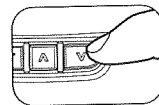
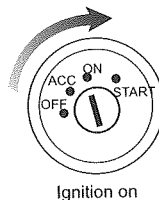


Voice alert turned off



Voice alert turned on

### Volume adjusting



Low volume



Medium volume

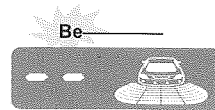


High volume

Press the "A" / "V" button to increase or decrease the volume.

1. Once the ignition is turned on, the system will test the 4 front sensors E,F,G and H automatically.

1) All sensors are working. 2) Damaged sensors are detected.



Beep once



Damaged sensor locations

Number of damaged sensors

- ⌚ Beep three times
- ⌚ The number and locations of the damaged sensors are shown on the display
- ⌚ Other sensors keep working normally

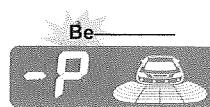
3) Once the self-test procedure is completed, the system will detect the obstacle in front of the car for 5 seconds.

2. When the reverse gear is selected, the system will test the 4 rear sensors A, B, C, D and 2 front sensors E and H automatically.

1) All sensors are working. 2) Obstacle >0.3m/1.0ft

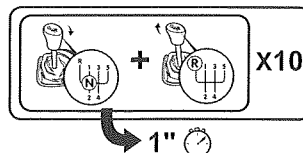
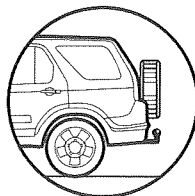


All the sensor normal



- ⌚ Beep three times
- ⌚ The number and locations of the damaged sensors are shown on the display
- ⌚ Other sensors keep working normally

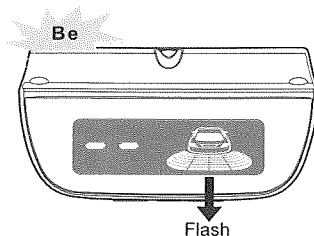
## Learning function for cars with tow-bar or spare wheel



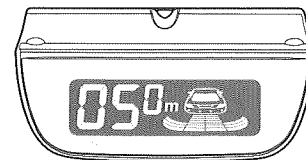
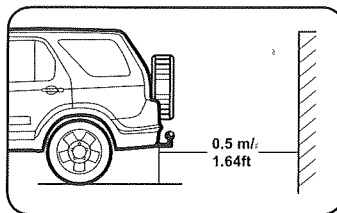
Ignition on, shift the gear from "N" to "R" and shift back in 1 second and repeat for 10 times. At the 10th time stay at "R" position for 6 seconds to achieve the learning function.

Ignition on, shift the gear from "N" to "R" and shift back in 1 second and repeat for 12 times. At the 12th time stay at "R" position for 8 seconds to clean the learning function.

Note: If you forget the shift-times, please stay at "R" position for 2 seconds to clean the memory and next time will be the first time.



The display will flash 3 times then beep once, this indicates that the learning function is successful and the system will not warn for tow-bar or spare wheel.



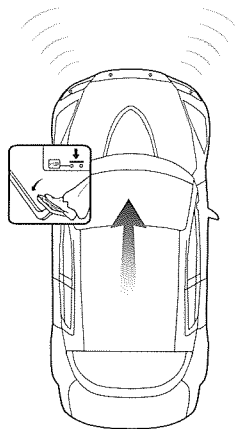
When the learning function is activated, the system will ignore the tow-bar or spare wheel and only detect other objects behind the vehicle.

Note: If the vehicle does not have tow-bar or spare wheel, you do not need to use this function.

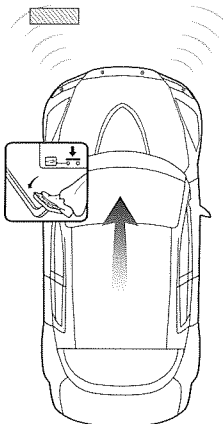



## How does the system work

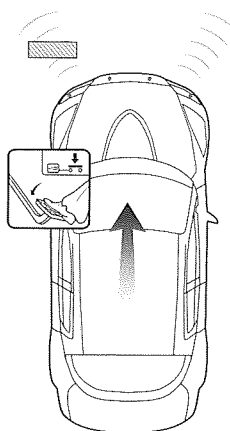
### Driving forward (6 sensor)




0.81m/2.62ft  
**0.8** m   
No beep

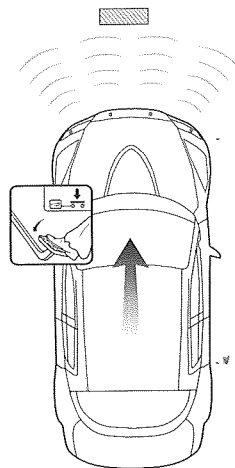


0.35m/1.15ft  
**0.35** m   
Be — Be —



Stop(<0.30m/0.98ft)  
**-P**   
Be —

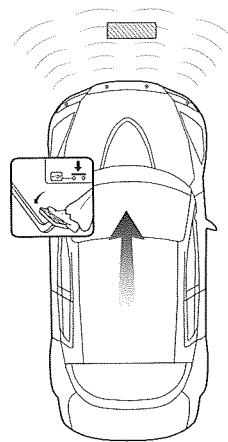
# Driving forward (8 sensor)



0.81m/2.62ft



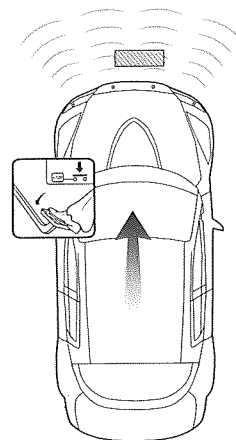
No beep



0.40m/1.30ft



Be — Be —

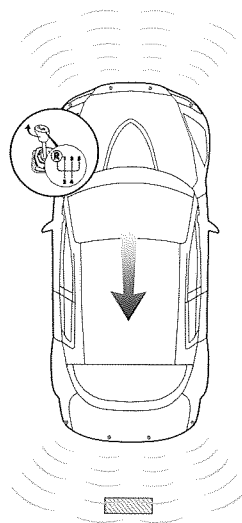


Stop(<0.30m/0.98ft)

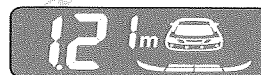


Be —

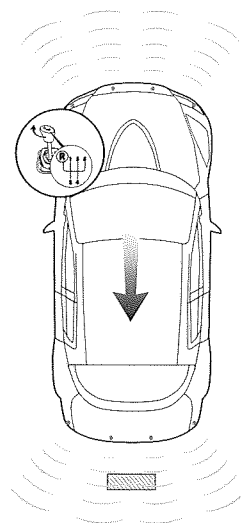
# Reversing



1.2m/3.9ft



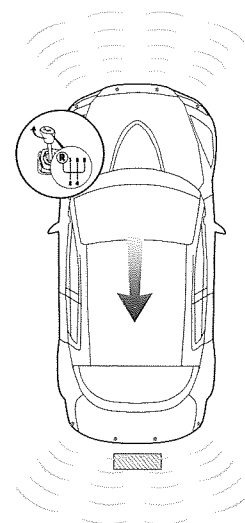
Be---



0.6m/1.9ft



Be---Be---

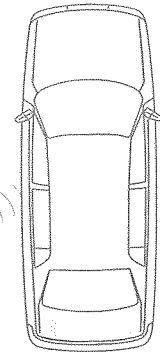
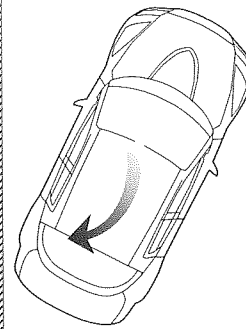
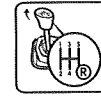
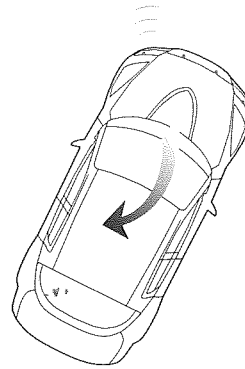
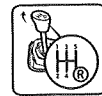
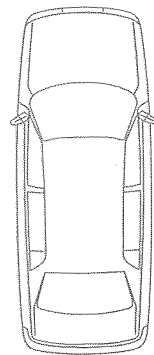


Stop(<0.3m/1.0ft)



Be-----

# Zigzag reversing



0.3m/1.0ft



Be-Be-Be-Be-

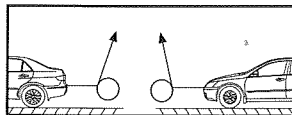
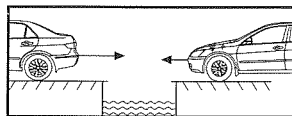
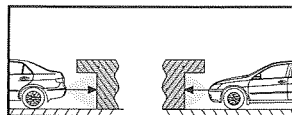
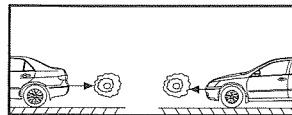
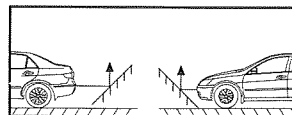
Stop! (<0.3m/1.0ft)



Be\_\_\_\_\_

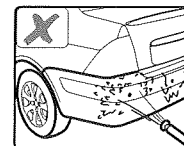
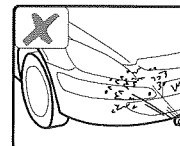
## Attention

False detection may occur in the following situations:

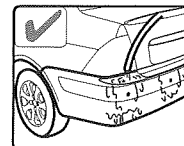
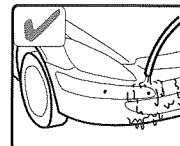


- After installation, please fully test the system before use.
- Dirty or damaged sensors can cause incorrect detection.
- Ensure that the self-test procedure is completed and all sensors are functioning before use.

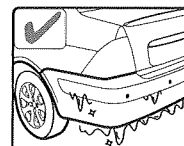
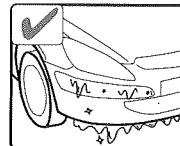
## Sensor maintenance



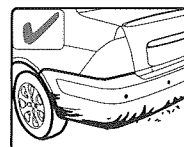
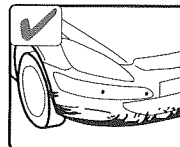
Do not wash the sensor with squirt gun or swab them forcibly.



Please wash car with low-pressure



Please melt the ice with warm water when the sensors are covered by ice.



Please clean the sensors with cloth or low-pressure water when the sensors are covered by mud or snow.

## Troubleshooting

- **After installation, the display doesn't work**

- a) Are all wires connected properly?
- b) Is the ignition turned on?
- c) Is the reverse gear selected or is the footbrake pressed?

- **Damaged sensor detected**

- a) Are all sensors plugged into the ECU correctly and tightly?
- b) Is the sensor wire broken?
- c) Is the sensor covered by mud or snow?
- d) Is the sensor damaged?

- **The object position does not correspond to the correct indicator on the blue digital display.**

- a) Are the sensor cables connected to the control unit (ECU) in the correct position?

- **False warning**

- a) Are all sensors plugged into the ECU in the correct position tightly?
- b) Does any sensor detect the ground?

- **Warning sound is too low or too high**

- a) Press the "Volume" buttons to adjust the volume to a suitable level.

- **No voice warning**

- a) Check whether the voice warning is switched on.

- **The display always shows 0.4~0.6m.**

- a) Are sensors mounted too low or detecting the ground?
- b) Check whether the sensor is installed up-side-down.
- c) Unplug 1 sensor at a time to check for root cause.

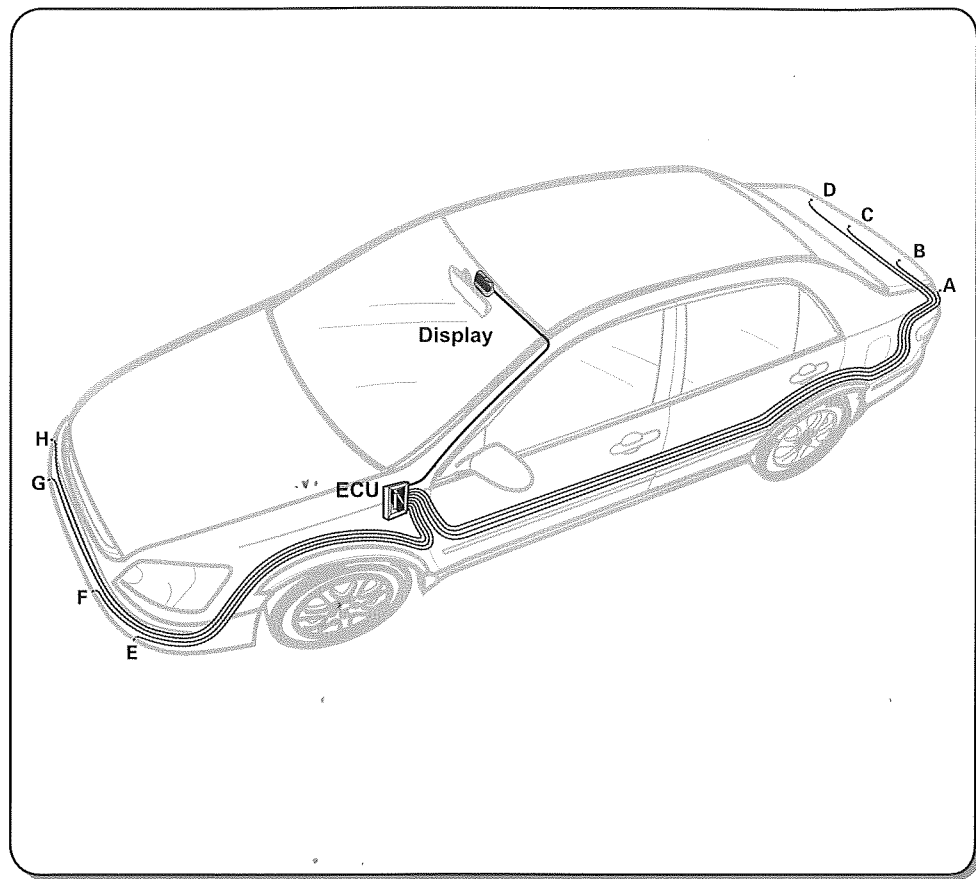
- **If the problem persists, please follow these steps**

- a) For consumers: contact your dealer or nearby service centre.
- b) For installer or dealer : check system according to "Checking flow chart" from.

# **Parking Assist System**

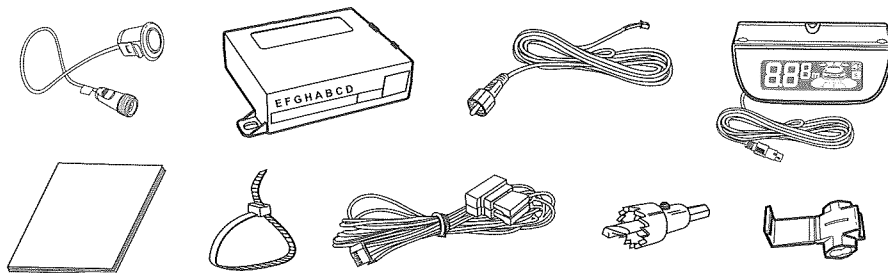
Installation Manual

## Brief installation diagram



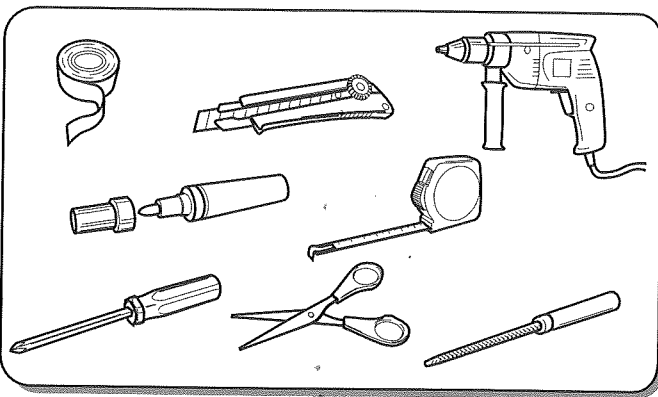


## Packing list



※ The actual sensor may vary from the image shown above

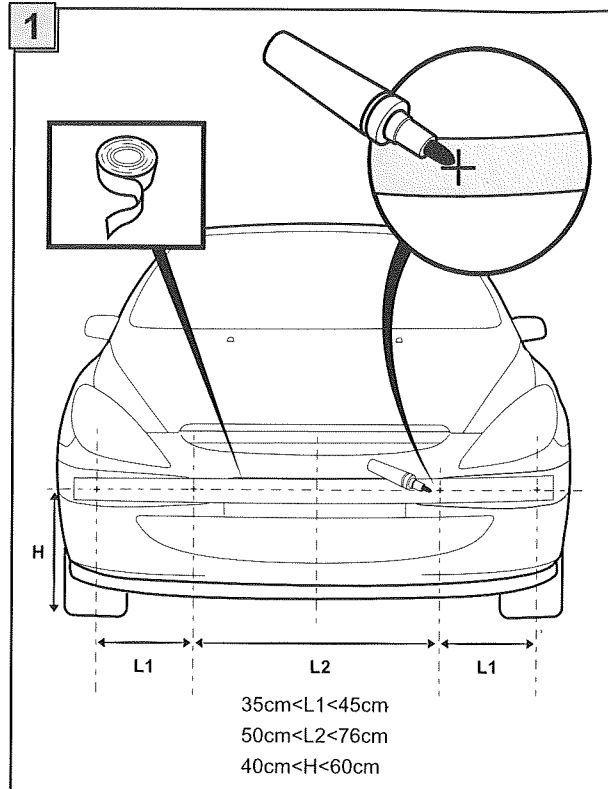
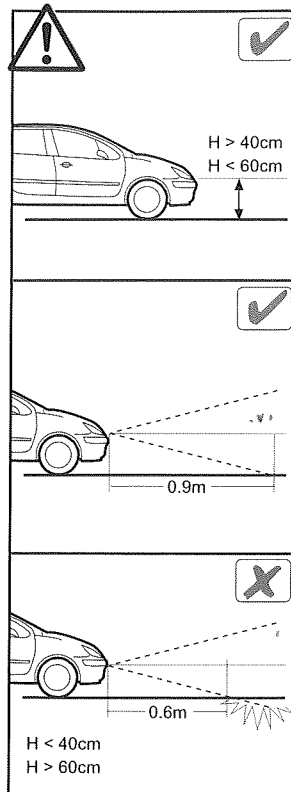
## Installation tools

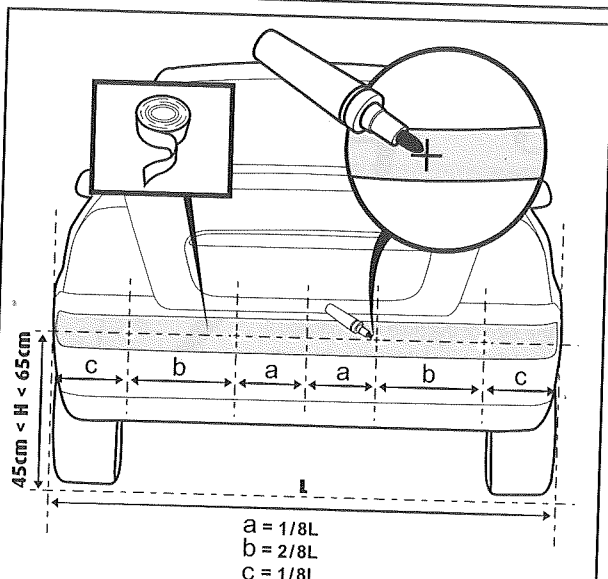
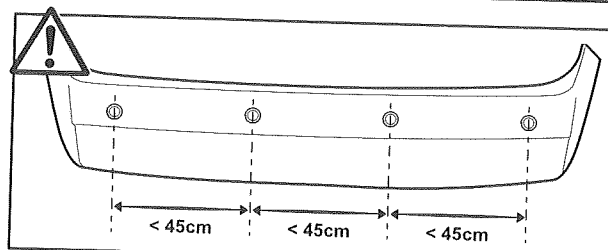
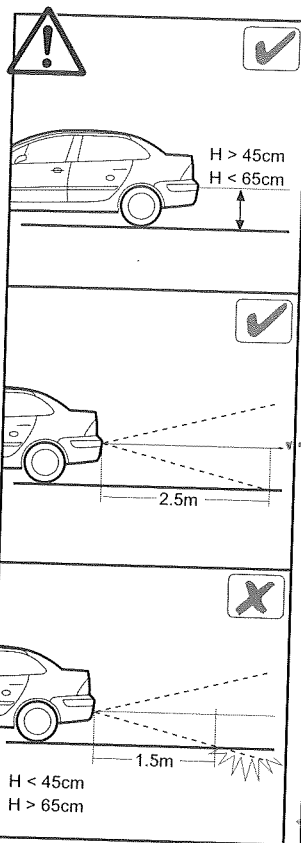


60' ~ 80'

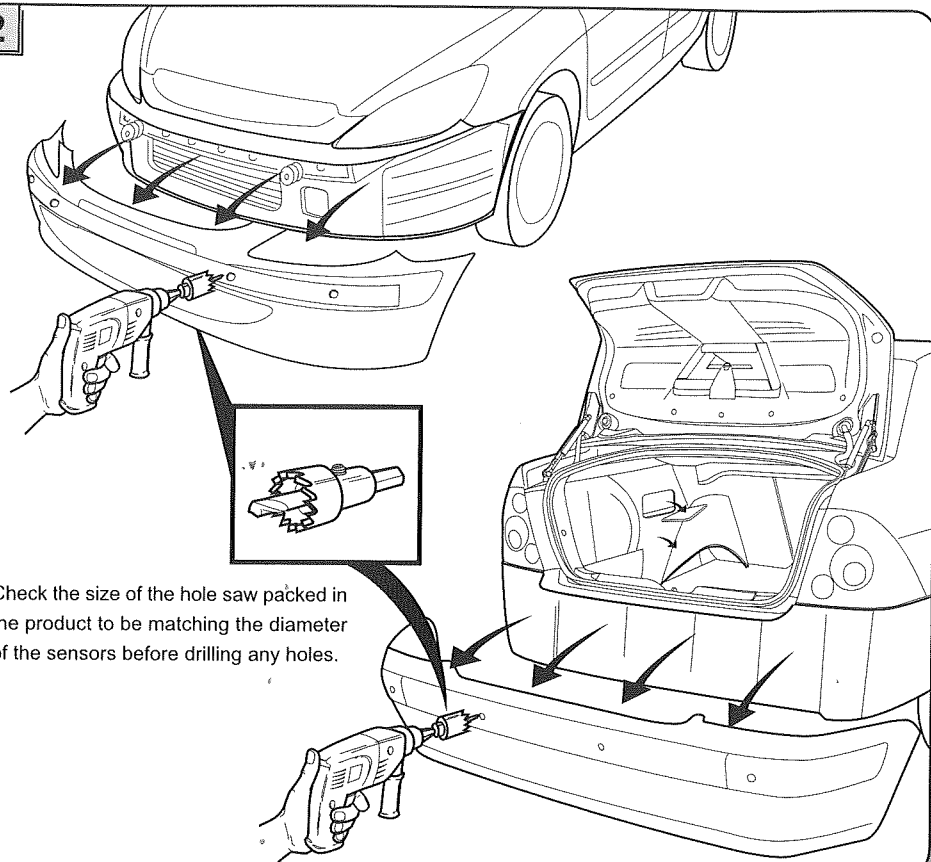
## Sensor installation

Pls adjust the sensor angle according to sensor height and bumper angle, avoid detecting to ground.

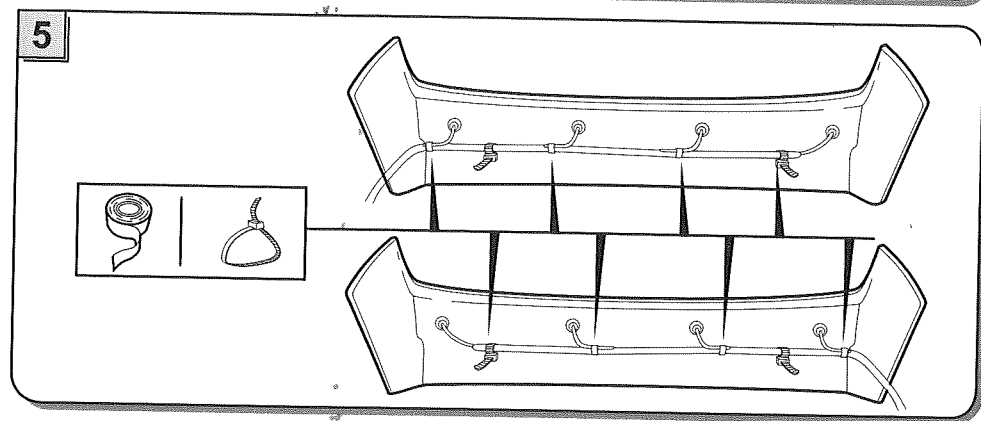
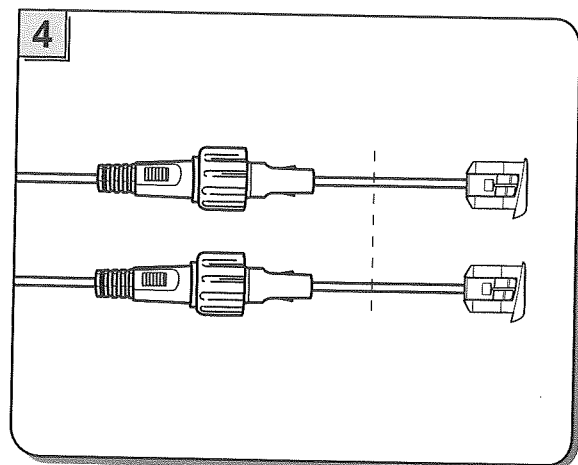
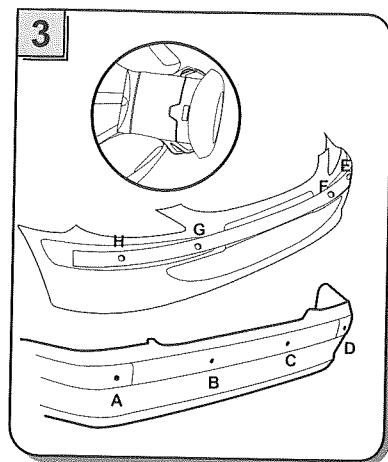




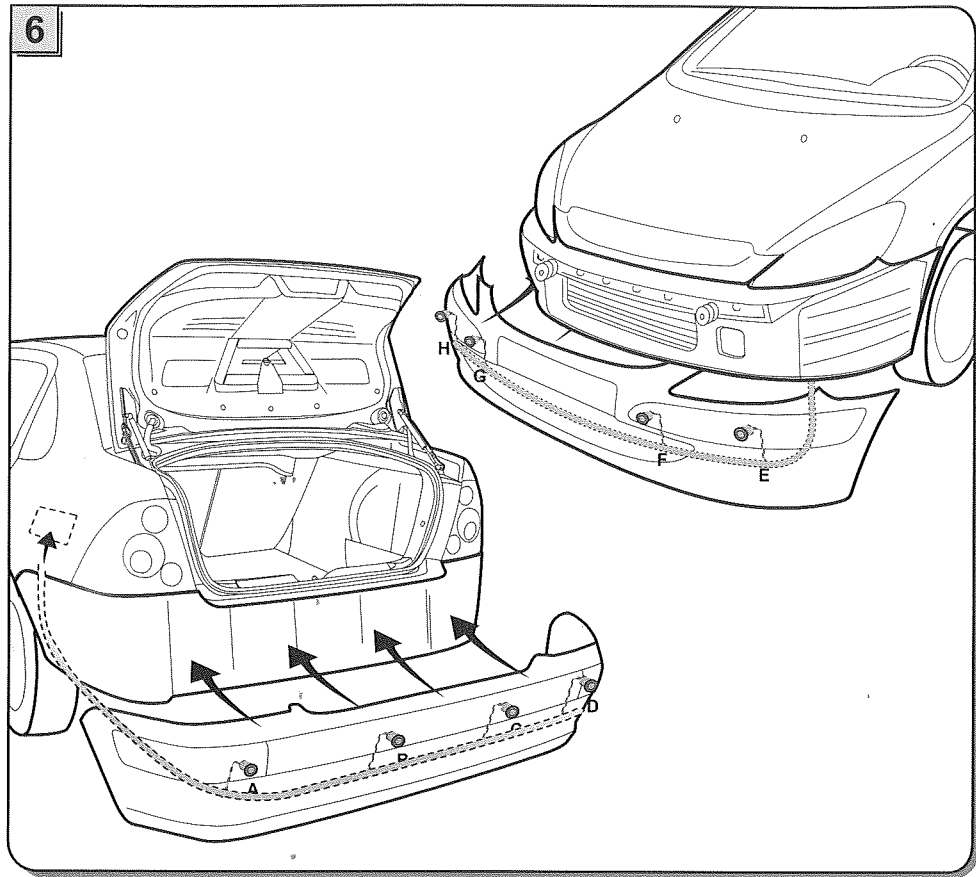
2



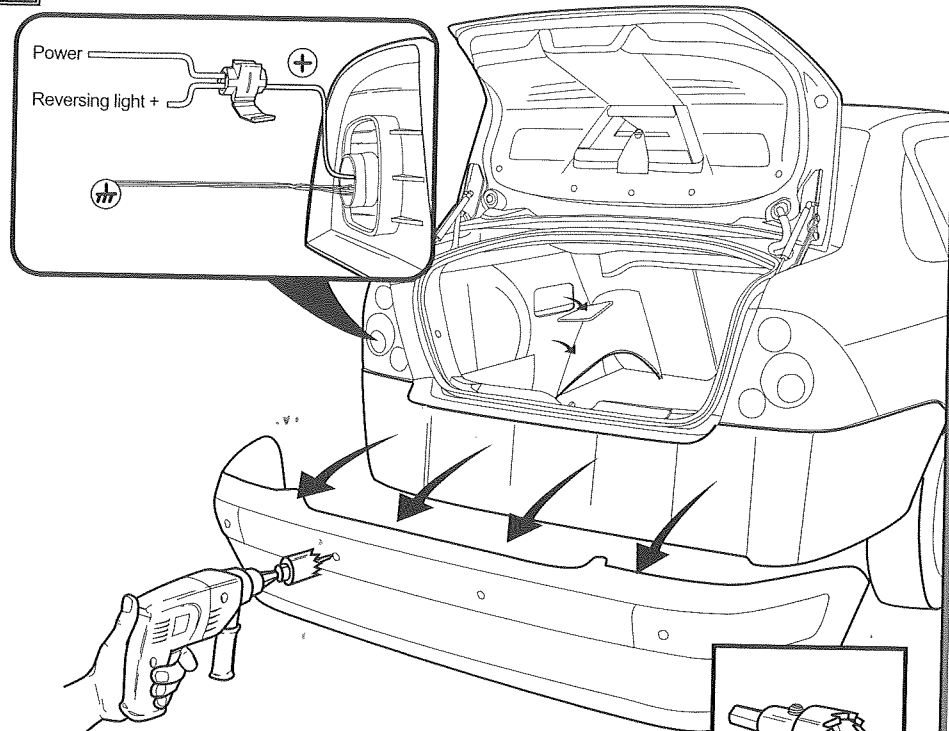
Check the size of the hole saw packed in the product to be matching the diameter of the sensors before drilling any holes.



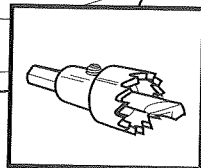
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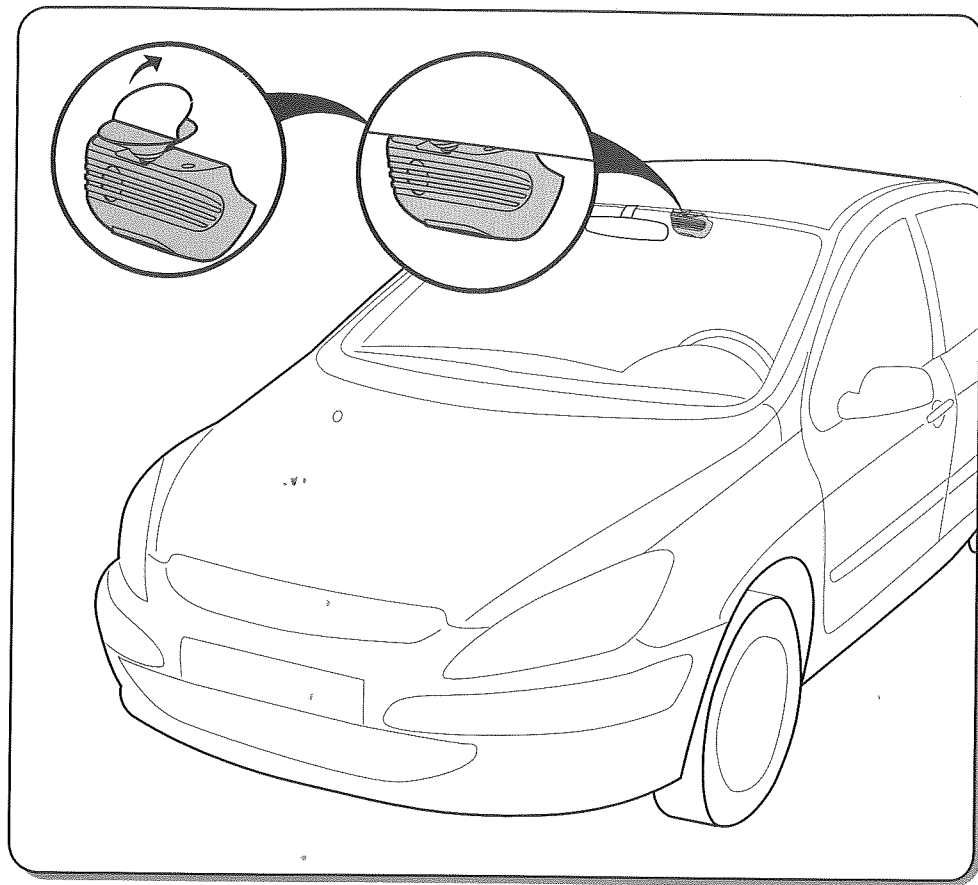
7



Check the size of the hole saw packed in the product to be matching the diameter of the sensors before drilling any holes.

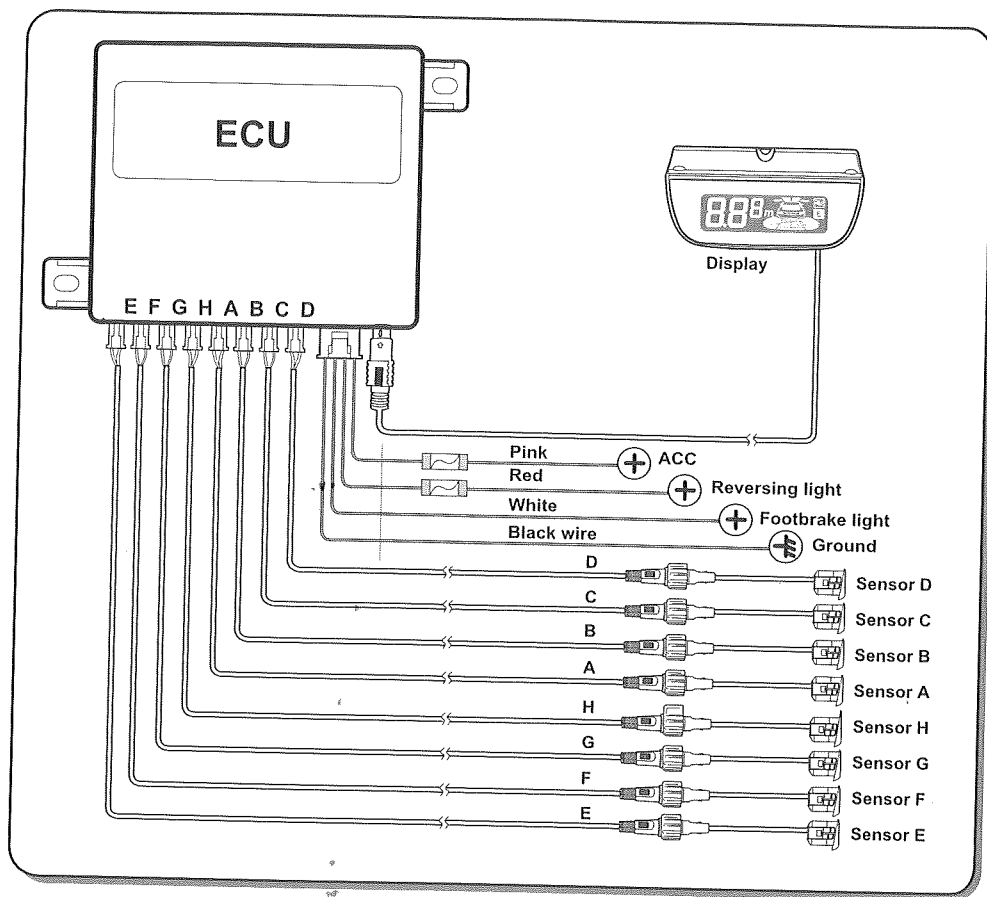


## Display installation

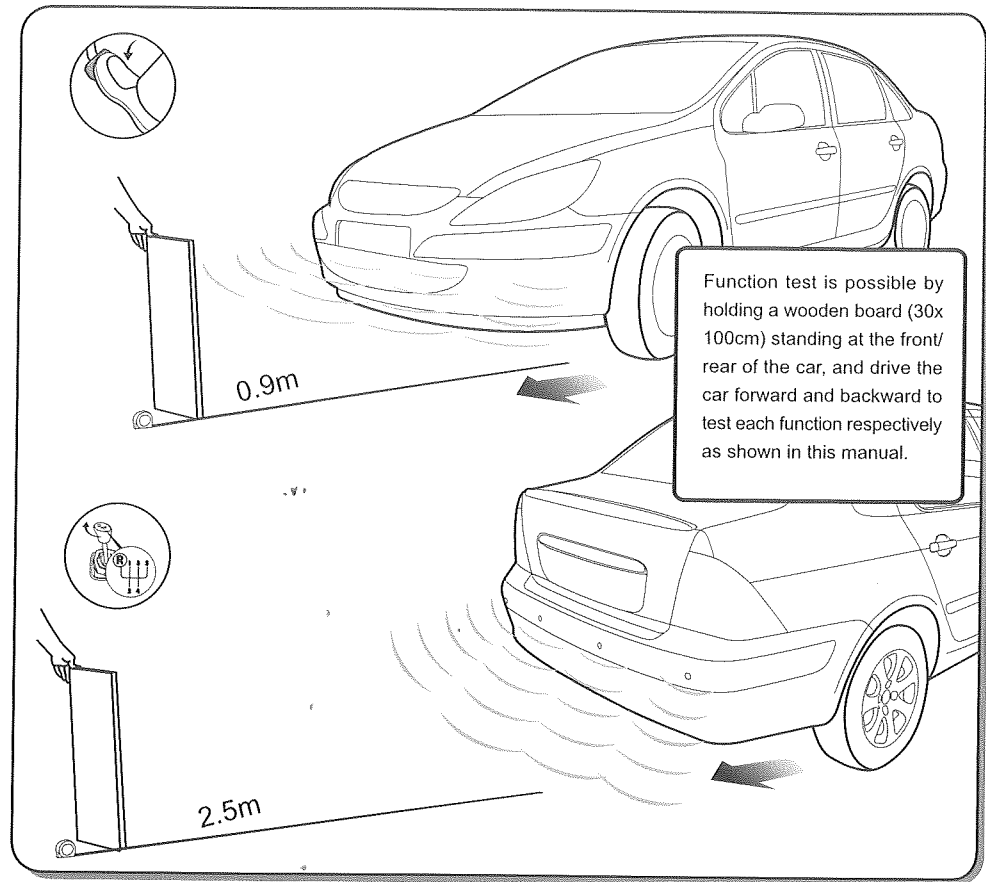




## Wire connection



## Function test after installation



*Think safety think Steelmate*



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